Chapter 2.1.9. Bluetongue

The Bureau noted that the report of the *ad hoc* Group on Bluetongue had been circulated for the information of Member Countries during the 72nd General Session. Extensive comments received from the EU (available on the EU Website at http://europa.eu.int/comm/food/international/organisations/oie_en.htm) were examined by the Bureau.

The Bureau was not aware of any information to contradict the conclusions of the recent OIE Bluetongue Conference regarding the infective period for bluetongue, and did not make any changes to the article. The Bureau noted that an appendix on surveillance for bluetongue was being developed by the Scientific Commission for Animal Diseases and the EU comments on surveillance would be taken into account by that Commission.

The Bureau noted the concerns expressed by the EU that there was insufficient scientific evidence on the safety of vaccinated animals to support the position that such animals could be moved without additional measures. The EU also commented on the likely competence of *Culicoides* species.

CHAPTER 2.1.9.

BLUETONGUE

Article 2.1.9.1.

For the purposes of the *Terrestrial Code*, the *infective period* for bluetongue virus (BTV) shall be $\frac{100}{60}$ days.

The global BTV distribution historically has been shown to be is currently between latitudes of approximately 5040°N and 35°S but is known to be expanding in the northern hemisphere.

In the absence of clinical disease in a country or zone within this part of the world, its BTV status should be determined by an ongoing surveillance and monitoring programme (carried out in conformity with the provisions of Chapter 1.3.6.) designed in accordance with the epidemiology of the disease, i.e. focusing on climatic and geographical factors, the biology and likely competence of *Culicoides* and/or serology of susceptible animals. The programme may need to be adapted to target parts of the country or zone at a higher risk due to historical, geographical and climatic factors, ruminant population data and *Culicoides* ecology, or proximity to enzootic or incursional zones as described in Chapter 1.3.6. Random and targeted serological surveillance should provide at least a 95% level of confidence of detecting an annual seroconversion incidence of 2% in cattle (or other ruminant species if sufficient cattle are not available).

<u>All</u> countries or zones located outside this part of the world but adjacent to a country or zone not having free status should be subjected to similar surveillance. The surveillance programme should be carried out over a distance of at least 100 kilometres from the border with that country or zone, <u>but a lesser distance could be acceptable if there are relevant ecological or geographical features likely to interrupt the transmission of BTV.</u>

Standards for diagnostic tests and vaccines are described in the Terrestrial Manual.

Article 2.1.9.2.

BTV free country or zone

- 1) A country or a zone may be considered free from BTV when bluetongue is notifiable in the whole country and either:
 - a) the country or zone lies wholly north of <u>50</u>40°N or south of 35°S, and is not adjacent to a country or zone not having a free status; or
 - b) a surveillance and monitoring programme as described in <u>Chapter 1.3.6</u> Article 2.1.9.1. has demonstrated no evidence of BTV in the country or zone during the past 2 years, nor have any ruminants been vaccinated against bluetongue in the country or zone during the past 12 months; or
 - c) a surveillance and monitoring programme has demonstrated no evidence of *Culicoides* <u>likely</u> to be competent <u>BTV</u> vectors in the country or zone.

For maintenance of the free status, the provisions of the last paragraph of Article 2.1.9.1. may need to be complied with on a continuous basis according to the geographical location of the country or zone.

- 2) A BTV free country or zone in which surveillance and monitoring has found no evidence that <u>Culicoides likely to be competent</u> BTV vectors are present will not lose its free status through the importation of <u>vaccinated</u>, seropositive or infective animals, or semen or embryos/ova from infected countries or zones.
- <u>A BTV free country or zone in which surveillance and monitoring has found evidence that Culivoides likely to be competent BTV vectors are present will not lose its free status through the importation of vaccinated or seropositive animals from infected countries or zones, provided:</u>
 - a) the animals have been vaccinated in accordance with the *Terrestrial Manual* at least 30 days prior to dispatch with a vaccine which covers all serotypes whose presence in the source population has been demonstrated through a surveillance and monitoring programme as described in Chapter 1.3.6, and that the animals are identified in the accompanying certification as having been vaccinated; or
 - b) the animals are not vaccinated, and a surveillance and monitoring programme as described in Chapter 1.3.6 has been in place in the source population for a period of 60 days immediately prior to dispatch, and no evidence of BTV transmission has been detected.
- 4) A BTV free country or zone adjacent to an infected country or zone should include a *surveillance* zone in which surveillance is conducted as described in Chapter 1.3.6 Article 2.1.9.1. Animals within this the *surveillance* zone must be subjected to continuing surveillance. The boundaries of the *surveillance* this zone must be clearly defined, and must take account of geographical and epidemiological factors that are relevant to BTV transmission infection.

Article 2.1.9.3.

BTV seasonally free zone

A BTV seasonally free zone is a part of an infected country or zone for which for part of a year, surveillance and monitoring demonstrate no evidence either of BTV transmission or of adult *Culicoides* likely to be competent BTV vectors.

For the application of Articles 2.1.9.7., 2.1.9.10. and 2.1.9.14., the seasonally free period is taken to commence the day following the last evidence of BTV transmission (as demonstrated by the surveillance and monitoring programme), or of the cessation of activity of adult *Culivoides* <u>likely to be competent BTV vectors</u>.

For the application of Articles 2.1.9.7., 2.1.9.10. and 2.1.9.14., the seasonally free period is taken to conclude either:

- 1) at least 28 days before the earliest date that historical data show bluetongue virus activity has recommenced; or
- 2) immediately if current climatic data or data from a surveillance and monitoring programme indicate an earlier resurgence of activity of adult *Culicoides* likely to be competent BTV vectors.

A BTV seasonally free zone in which surveillance and monitoring has found no evidence that <u>Culicoides</u> <u>likely to be competent</u> BTV vectors are present will not lose its free status through the importation of <u>vaccinated</u>, seropositive or infective animals, or semen or embryos/ova from infected countries or zones.

Article 2.1.9.4.

BTV infected country or zone

A BTV infected country or zone is a clearly defined area where evidence of BTV has been reported during the past 2 years.

Article 2.1.9.5.

Veterinary Administrations of countries shall consider whether there is a risk with regard to BTV infection in accepting importation or transit through their territory, from other countries, of the following commodities:

- 1) ruminants and other BTV susceptible herbivores;
- 2) semen of these species;
- 3) embryos/ova of these species;
- 4) pathological material and biological products (from these species) (see Chapter 1.4.6. and Section 1.5.).

Other *commodities* should be considered as not having the potential to spread BTV when they are the subject of *international trade*.

Article 2.1.9.6.

When importing from BTV free countries or zones, Veterinary Administrations should require:

for ruminants and other BTV susceptible herbivores

the presentation of an *international veterinary certificate* attesting that the animals:

- 1) were kept in a BTV free country or zone since birth or for at least <u>60</u>100 days prior to shipment; or
- 2) were kept in a BTV free country or zone for at least 28 days, then were subjected, with negative results, to a serological test to detect antibody to the BTV group <u>according to the Terrestrial Manual</u>, such as the BT competition ELISA or the BT AGID test, and remained in the BTV free country or zone until shipment; or

- 3) were kept in a BTV free country or zone for at least 7 days, then were subjected, with negative results, to <u>an agent identification test according to the Terrestrial Manual a BTV isolation test or polymerase chain reaction test on a blood sample</u>, and remained in the BTV free country or zone until shipment; <u>or</u>
- 4) were kept in a BTV free country or zone for at least 7 days, and were vaccinated in accordance with the *Terrestrial Manual* 30 days before introduction into the free country or zone against all serotypes whose presence in the source population has been demonstrated through a surveillance and monitoring programme as described in Chapter 1.3.6, were identified as having been vaccinated and remained in the BTV free country or zone until shipment;

AND

<u>5)4)</u> if the animals were exported from a free zone, either:

- a) did not transit through an infected zone during transportation to the *place of shipment*; or
- b) were protected from attack from *Culicoides* <u>likely to be competent BTV vectors</u> at all times when transiting through an infected zone; <u>or</u>
- c) had been vaccinated in accordance with point 4) above.

Article 2.1.9.7.

When importing from BTV seasonally free zones, Veterinary Administrations should require:

for ruminants and other BTV susceptible herbivores

the presentation of an international veterinary certificate attesting that the animals:

- 1) were kept during the seasonally free period in a BTV seasonally free zone for at least <u>60</u>100 days prior to shipment; or
- 2) were kept during the BTV seasonally free period in a BTV seasonally free zone for at least 28 days prior to shipment, and were subjected during the residence period in the zone to a serological test to detect antibody to the BTV group, according to the Terrestrial Manual such as the BT competition ELISA or the BT AGID test, with negative results on two occasions, with an interval of not less than 7 days between each test, the first test being carried out at least 21 days after the commencement of the residence period; or
- 3) were kept during the BTV seasonally free period in a BTV seasonally free zone for at least 14 days prior to shipment, and were subjected during the residence period in the zone to an agent identification test according to the *Terrestrial Manual* to a BTV isolation test or polymerase chain reaction test, with negative results, on blood samples taken on two occasions, with an interval of not less than 7 days between each test, the first test being carried out at least 7 days after the commencement of the residence period; or
- 4) were kept during the seasonally free period in a BTV seasonally free zone, and were vaccinated in accordance with the *Terrestrial Manual* 30 days before introduction into the free country or zone against all serotypes whose presence in the source population has been demonstrated through a surveillance and monitoring programme as described in Chapter 1.3.6, were identified as having been vaccinated and remained in the BTV free country or zone until shipment;

AND

<u>5)4</u>) if the animals were exported from a free zone, either:

- a) did not transit through an infected zone during transportation to the *place of shipment*, or
- b) were protected from attack from *Culicoides* <u>likely to be competent BTV vectors</u> at all times when transiting through an infected zone, <u>or</u>
- c) were vaccinated in accordance with point 4) above.

Article 2.1.9.8.

When importing from BTV infected countries or zones, *Veterinary Administrations* should require: for ruminants and other BTV susceptible herbivores

the presentation of an international veterinary certificate attesting that the animals:

- 1) were protected from attack from *Culicoides* <u>likely to be competent BTV vectors</u> for at least <u>60100</u> days prior to shipment; or
- 2) were protected from attack from *Culicoides* likely to be competent BTV vectors for at least 28 days prior to shipment, and were subjected during that period to a serological test according to the *Terrestrial Manual* to detect antibody to the BTV group, such as the BT competition ELISA or the BT AGID test, with negative results on two occasions, with an interval of not less than 7 days between each test, the first test being carried out at least 21 days after introduction into the *quarantine station*; or
- 3) were protected from attack from *Culicoides* <u>likely to be competent BTV vectors</u> for at least 14 days prior to shipment, and were subjected during that period to <u>an agent identification test according to the Terrestrial Manual a BTV isolation test or polymerase chain reaction test, with negative results, on blood samples taken on two occasions, with an interval of not less than 7 days between each test, the first test being carried out at least 7 days after introduction into the *quarantine station*; or</u>
- <u>were vaccinated in accordance with the Terrestrial Manual at least 30 days before shipment, against all serotypes whose presence in the source population has been demonstrated through a surveillance and monitoring programme as described in Chapter 1.3.6, and were identified in the accompanying certification as having been vaccinated;</u>
- 5) are not vaccinated, a surveillance and monitoring programme as described in Chapter 1.3.6. has been in place in the source population for a period of 60 days immediately prior to shipment, and no evidence of BTV transmission has been detected;

and

- <u>were protected from attack from Culicoides likely to be competent BTV vectors during transportation to the place of shipment</u>; or
- 7) were vaccinated 30 days before shipment or had antibodies against all serotypes whose presence in the zones of transit has been demonstrated through a surveillance and monitoring programme as described in Chapter 1.3.6.

Article 2.1.9.9.

When importing from BTV free countries or zones, *Veterinary Administrations* should require: for semen of ruminants and other BTV susceptible herbivores

the presentation of an international veterinary certificate attesting that:

- 1) the donor animals:
 - a) were kept in a BTV free country or zone for at least <u>60</u>100 days before commencement of, and during, collection of the semen; or
 - b) were subjected to a serological test <u>according to the Terrestrial Manual</u> to detect antibody to the BTV group, such as the BT competition ELISA or the BT AGID test, between 28 and 60 days after the last collection for this consignment, with negative results; or
 - c) were subjected to <u>an agent identification test according to the Terrestrial Manual</u> a virus isolation test or polymerase chain reaction (PCR) test on blood samples collected at commencement and conclusion of, and at least every 7 days (virus isolation test) or at least every 28 days (PCR test) during, semen collection for this consignment, with negative results;
- 2) the semen was collected, processed and stored in conformity with the provisions of either Appendix 3.2.1. or Appendix 3.2.2.

Article 2.1.9.10.

When importing from BTV seasonally free zones, Veterinary Administrations should require:

for semen of ruminants and other BTV susceptible herbivores

the presentation of an international veterinary certificate attesting that:

- 1) the donor animals:
 - a) were kept during the BTV seasonally free period in a seasonally free zone for at least <u>60100</u> days before commencement of, and during, collection of the semen; or
 - b) were subjected to a serological test <u>according to the Terrestrial Manual</u> to detect antibody to the BTV group such as the BT competition ELISA or the BT AGID test, with negative results, at least every 60 days throughout the collection period and between 28 and 60 days after the final collection for this consignment; or
 - c) were subjected to <u>an agent identification test according to the Terrestrial Manual</u> a virus isolation test or polymerase chain reaction (PCR) test on blood samples collected at commencement and conclusion of, and at least every 7 days (virus isolation test) or at least every 28 days (PCR test) during, semen collection for this consignment, with negative results;
- 2) the semen was collected, processed and stored in conformity with the provisions of either Appendix 3.2.1. or Appendix 3.2.2.

Article 2.1.9.11.

When importing from BTV infected countries or zones, Veterinary Administrations should require:

for semen of ruminants and other BTV susceptible herbivores

the presentation of an international veterinary certificate attesting that:

- 1) the donor animals:
 - a) were protected from attack from *Culicoides* <u>likely to be competent BTV vectors</u> for at least <u>60100</u> days before commencement of, and during, collection of the semen; or
 - b) were subjected to a serological test <u>according to the Terrestrial Manual</u> to detect antibody to the BTV group such as the BT competition ELISA or the BT AGID test, with negative results, at least every 60 days throughout the collection period and between 28 and 60 days after the final collection for this consignment; or
 - c) were subjected to <u>an agent identification test according to the Terrestrial Manual</u> a virus isolation test or polymerase chain reaction (PCR) test on blood samples collected at commencement and conclusion of, and at least every 7 days (virus isolation test) or at least every 28 days (PCR test) during, semen collection for this consignment, with negative results:
- 2) the semen was collected, processed and stored in conformity with the provisions of either Appendix 3.2.1. or Appendix 3.2.2.

Article 2.1.9.12.

Regardless of the bluetongue status of the exporting country, Veterinary Administrations of importing countries should require:

for in vivo derived bovine embryos/oocytes

the presentation of an *international veterinary certificate* attesting that the embryos/oocytes were collected, processed and stored in conformity with the provisions of Appendix 3.3.1. or Appendix 3.3.3., as relevant.

Article 2.1.9.13.

When importing from BTV free countries or zones, Veterinary Administrations should require:

for *in vivo* derived embryos of ruminants (other than bovines) and other BTV susceptible herbivores the presentation of an *international veterinary certificate* attesting that:

- 1) the donor females:
 - a) were kept in a BTV free country or zone for at least the <u>60</u>100 days prior to, and at the time of, collection of the embryos; or
 - b) were subjected to a serological test <u>according to the Terrestrial Manual</u> to detect antibody to the BTV group, such as the BT competition ELISA or the BT AGID test, between 28 and 60 days after collection, with negative results; or
 - c) were subjected to <u>an agent identification test according to the Terrestrial Manual</u> a BTV isolation test or polymerase chain reaction test on a blood sample taken on the day of collection, with negative results;
- 2) the embryos were collected, processed and stored in conformity with the provisions of Appendix 3.3.1.

Article 2.1.9.14.

When importing from BTV seasonally free zones, Veterinary Administrations should require:

for *in vivo* derived embryos/oocytes of ruminants (other than bovines) and other BTV susceptible herbivores and for *in vitro* produced bovine embryos

the presentation of an international veterinary certificate attesting that:

- 1) the donor females:
 - a) were kept during the seasonally free period in a seasonally free zone for at least <u>60</u>100 days before commencement of, and during, collection of the embryos/oocytes; or
 - b) were subjected to a serological test <u>according to the Terrestrial Manual</u> to detect antibody to the BTV group, such as the BT competition ELISA or the BT AGID test, between 28 and 60 days after collection, with negative results; or
 - c) were subjected to <u>an agent identification test according to the Terrestrial Manual a BTV isolation test or polymerase chain reaction test</u> on a blood sample taken on the day of collection, with negative results;
- 2) the embryos/oocytes were collected, processed and stored in conformity with the provisions of Appendix 3.3.1.

Article 2.1.9.15.

When importing from BTV infected countries or zones, Veterinary Administrations should require:

for *in vivo* derived embryos/oocytes of ruminants (other than bovines) and other BTV susceptible herbivores and for *in vitro* produced bovine embryos

the presentation of an international veterinary certificate attesting that:

- 1) the donor females:
 - a) were protected from attack from *Culivoides* <u>likely to be competent BTV vectors</u> for at least <u>60100</u> days before commencement of, and during, collection of the embryos/oocytes; or
 - b) were subjected to a serological test <u>according to the Terrestrial Manual</u> to detect antibody to the BTV group, such as the BT competition ELISA or the BT AGID test, between 28 and 60 days after collection, with negative results; or
 - c) were subjected to <u>an agent identification test according to the Terrestrial Manual</u> a BTV isolation test or polymerase chain reaction test on a blood sample taken on the day of collection, with negative results;
- 2) the embryos/oocytes were collected, processed and stored in conformity with the provisions of Appendix 3.3.1.

<u>Article 2.1.9.16.</u>

Protecting animals from Culicoides attack

When transporting animals through BTV infected countries or zones, *Veterinary Administrations* should require strategies to protect animals from attack from *Culicoides* likely to be competent BTV vectors during transport, taking into account the local ecology of the vector.

Strategies to protect animals from attack from *Culicoides* likely to be competent BTV vectors during transport through an infected country or zone should take into account the local ecology of the vector.

Potential risk management strategies include:

- 1) treating animals with chemical repellents prior to and during transportation;
- loading, transporting and unloading animals at times of low vector activity i.e. bright sunshine, low temperature;
 - 3) ensuring vehicles do not stop en route during dawn or dusk, or overnight, unless the animals are held behind insect proof netting;
- <u>darkening the interior of the vehicle, for example by covering the roof and/or sides of vehicles with shadecloth;</u>
- <u>5)</u> monitoring for vectors at common stopping and offloading points to gain information on seasonal variations;
- <u>one of the distortion of the </u>